

VETERINARY INTERCALATION

DAISY COOKSON



MY INTERCALATION

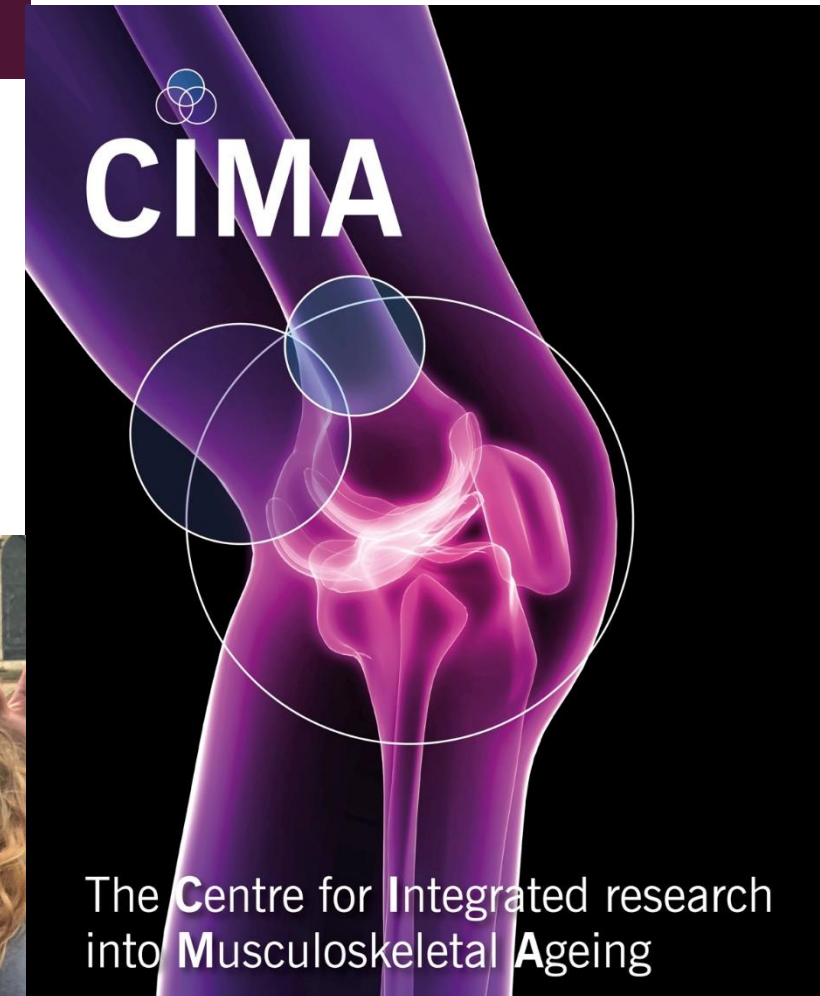
- 2021-2022 between 3rd and 4th year
- Masters of Research in Healthy Musculoskeletal Ageing
- First semester – 3 taught modules surrounding ageing of the integrated musculoskeletal system
- Second and third semester – research project



MRC
Medical
Research
Council

**VERSUS
ARTHRITIS**

Centre for Integrated
Research into
Musculoskeletal Ageing



UNIVERSITY OF
LIVERPOOL

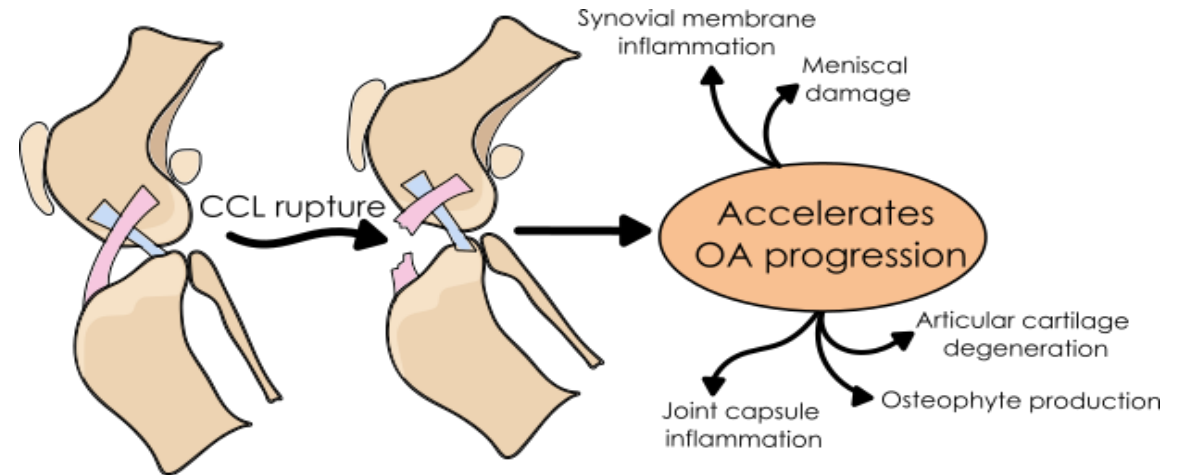
The
University
Of
Sheffield.

Newcastle
University

MY MRES – BACKGROUND

Cranial Cruciate Ligament (CCL)

- Cranial cruciate ligament (CCL) rupture is highly **prevalent, debilitating** and **expensive**
- Exact aetiopathogenesis of CCL degeneration is **poorly understood**
- **No diagnostic tests** capable of identifying at-risk individuals
- **Treatment is often limited** to ‘end-stage’ surgery



MY MRES – BACKGROUND

Extracellular Vesicles (EVs)

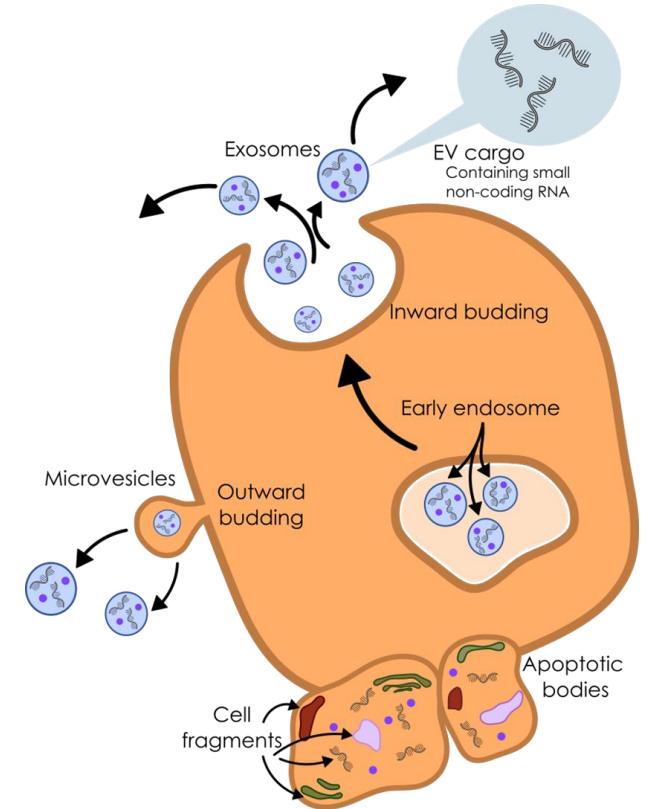
- Small structures secreted by cells into the extracellular space
- Key component of **cellular communication**
- Previous studies demonstrate their potential use in diagnosis and treatment of various disorders

Play a role in inflammation

Induce catabolic changes

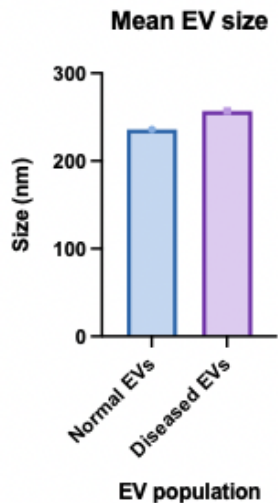
Contribute to extracellular matrix degradation

Imbalances can lead to degradation and joint destruction

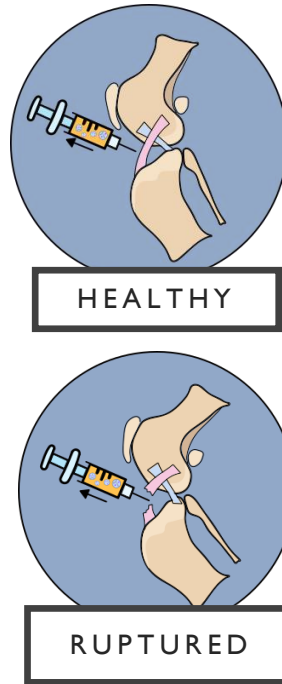


MY MRES – RESULTS

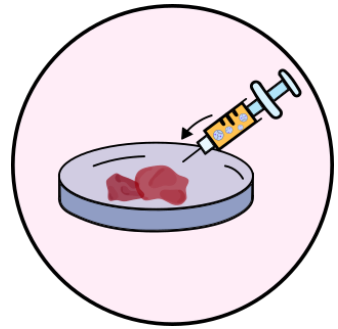
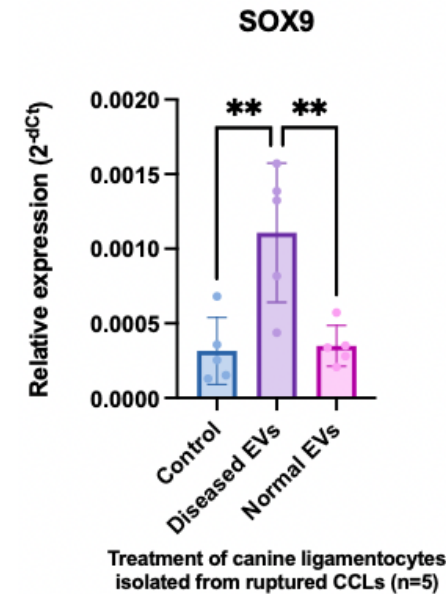
1. There were differences in the populations of EVs from healthy and diseased stifle joints



Could EVs and other molecules within the synovial fluid be used to identify **at risk individuals** or as **biomarkers** to indicate disease progression?

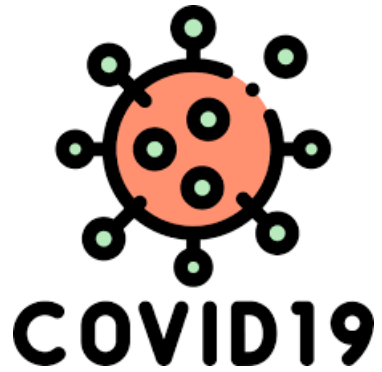


2. Diseased EVs caused a significant increase in SOX9, a marker of ligament degeneration



Can EVs help us to understand more about CCLD, potentially providing **alternative therapeutic strategies**?

WHY DID I DECIDE TO INTERCALATE?



Preventive Veterinary Medicine
Volume 208, November 2022, 105741



A Dog's Dinner: Factors affecting food choice and feeding practices for UK dog owners feeding raw meat-based or conventional cooked diets ☆

Genevieve Morgan, Nicola Williams, Vanessa Schmidt, Daisy Cookson, Carrie Symington, Gina Pinchbeck

Show more

Share Cite

<https://doi.org/10.1016/j.prevetmed.2022.105741>

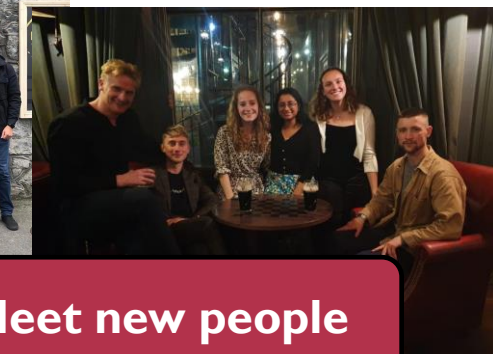
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Push myself out of my comfort zone



New opportunities



Meet new people

Further explore research

(and looks good on my CV!!)

OPPORTUNITIES AND ACHIEVEMENTS

LAB PLACEMENT

COMPLETING A DEGREE!



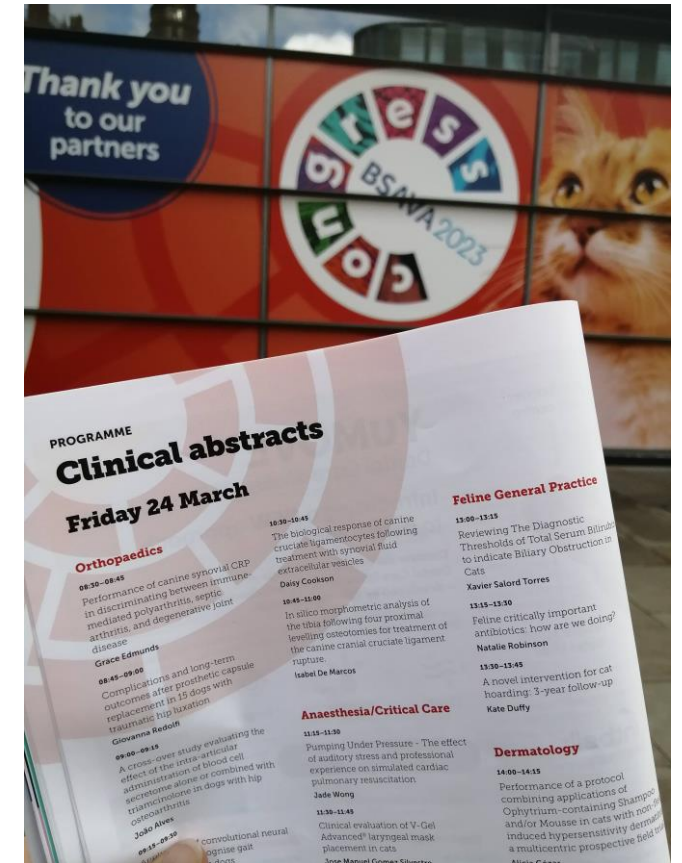
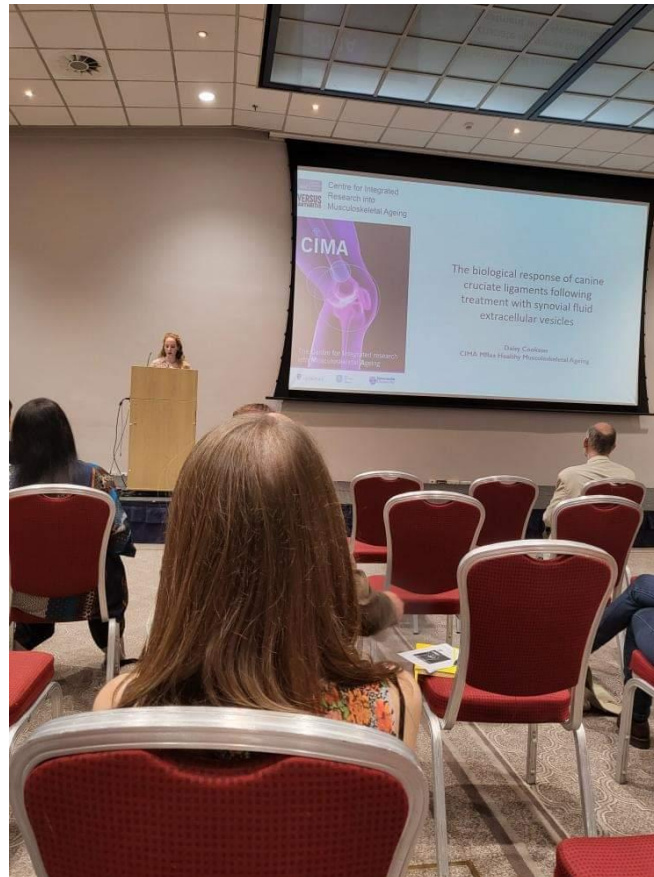
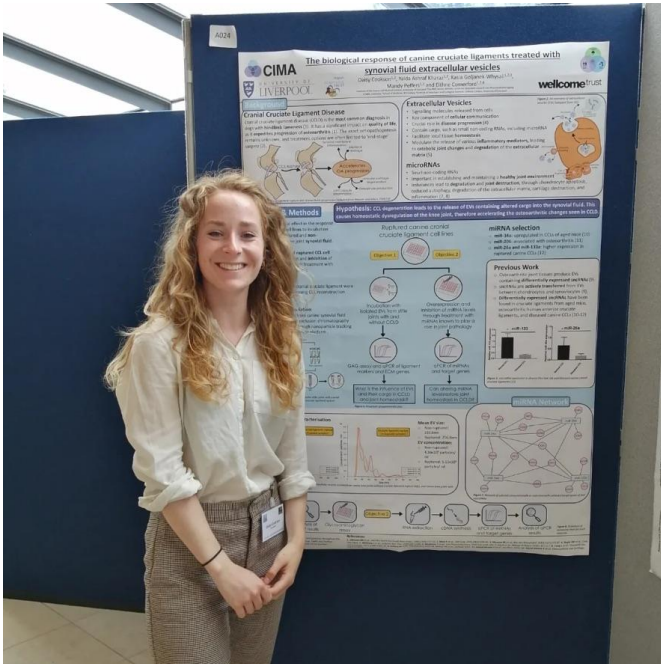
OPPORTUNITIES AND ACHIEVEMENTS

PUBLIC ENGAGEMENT



OPPORTUNITIES AND ACHIEVEMENTS

CONFERENCES



OPPORTUNITIES AND ACHIEVEMENTS

CONFERENCES - OARSI



Tour of the Rocky Mountains!



OPPORTUNITIES AND ACHIEVEMENTS

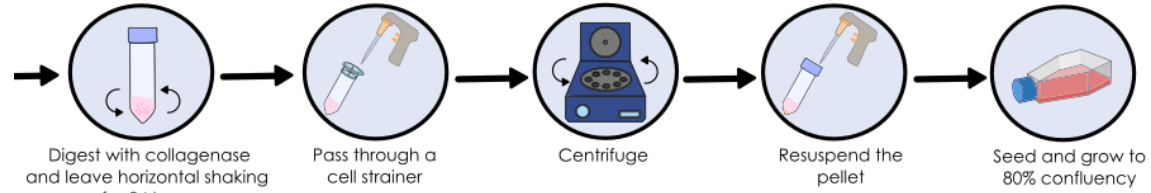
RCVS Fellows of the Future Competition



WHAT I GAINED FROM INTERCALATING



A degree!!



New skills



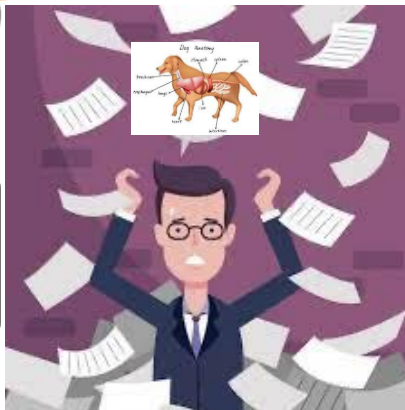
New friends



Confidence



A break from the vet workload



Career options



Fantastic opportunities



WHAT'S NEXT?

- Starting work as a mixed vet in Alford, Aberdeenshire
- Continue working on Placementt, a platform that aims to streamline work experience for students, institutes and businesses
- More research???



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